## 155 SHERIDAN STRUCTURAL DESIGN CONCEPT MKL | SI | 16-0020 | 3/13/17

Notes:

Preliminary design: NOT FOR CONSTRUCTION.
Based on architectural and civil drawings for site and building.

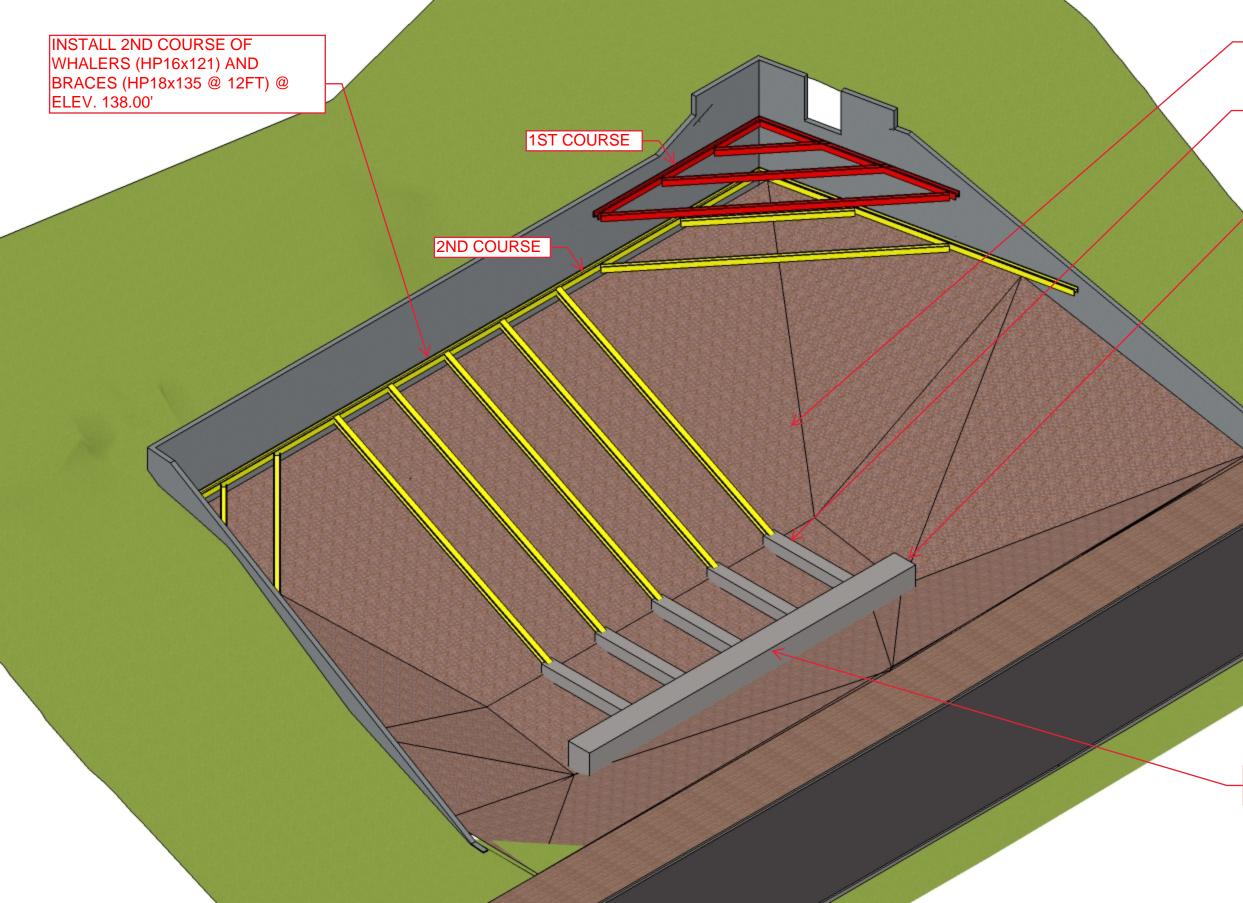
- All elevations are based on USGS per civil drawings.

1ST COURSE

DRIVE HP18x135 PILES @ 6'-0" O.C. W/ 3"x P.T. LAGGING AT PERIMETER -TYP. MAX UNBALANCED RETAINED HEIGHT = 13'-0". SEE CIVIL FOR ELEVATIONS.

INSTALL 1ST COURSE WHALERS AND BRACING @ ELEVATION 145.00'

## BEGIN EXCAVATION ONCE PERIMETER PILINGS ARE INSTALLED

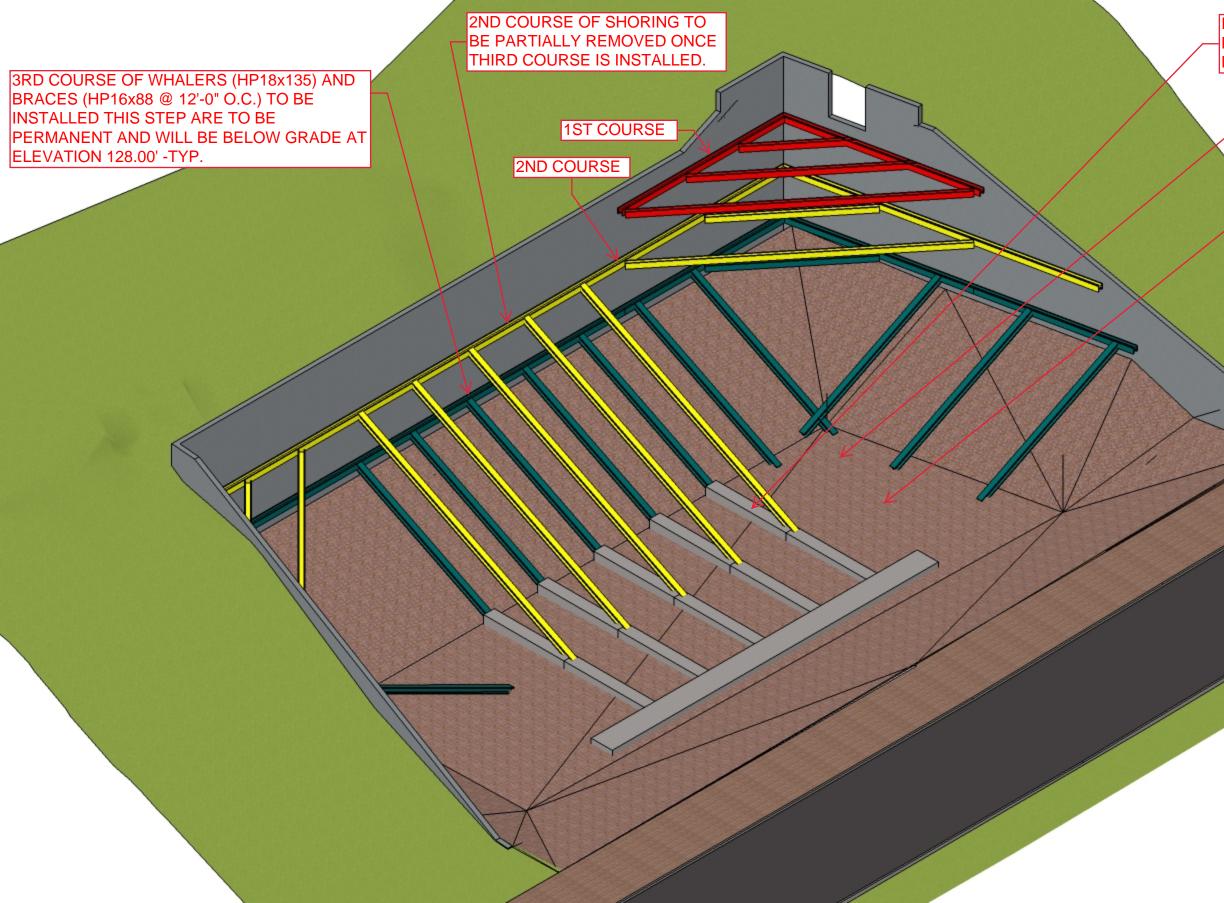


CONTINUE EXCAVATION ONCE BRACING IS INSTALLED

TRENCH FORMED CONCRETE GRADE BEAM 8" MIN BELOW GARAGE SLAB

> 4FT WIDE x 8FT TALL x 80FT LONG CONCRETE GRADE BEAM/ DEADMAN CAST 8" MIN BELOW GARAGE SLAB

CONTINUE EXCAVATION ONCE BRACING IS INSTALLED

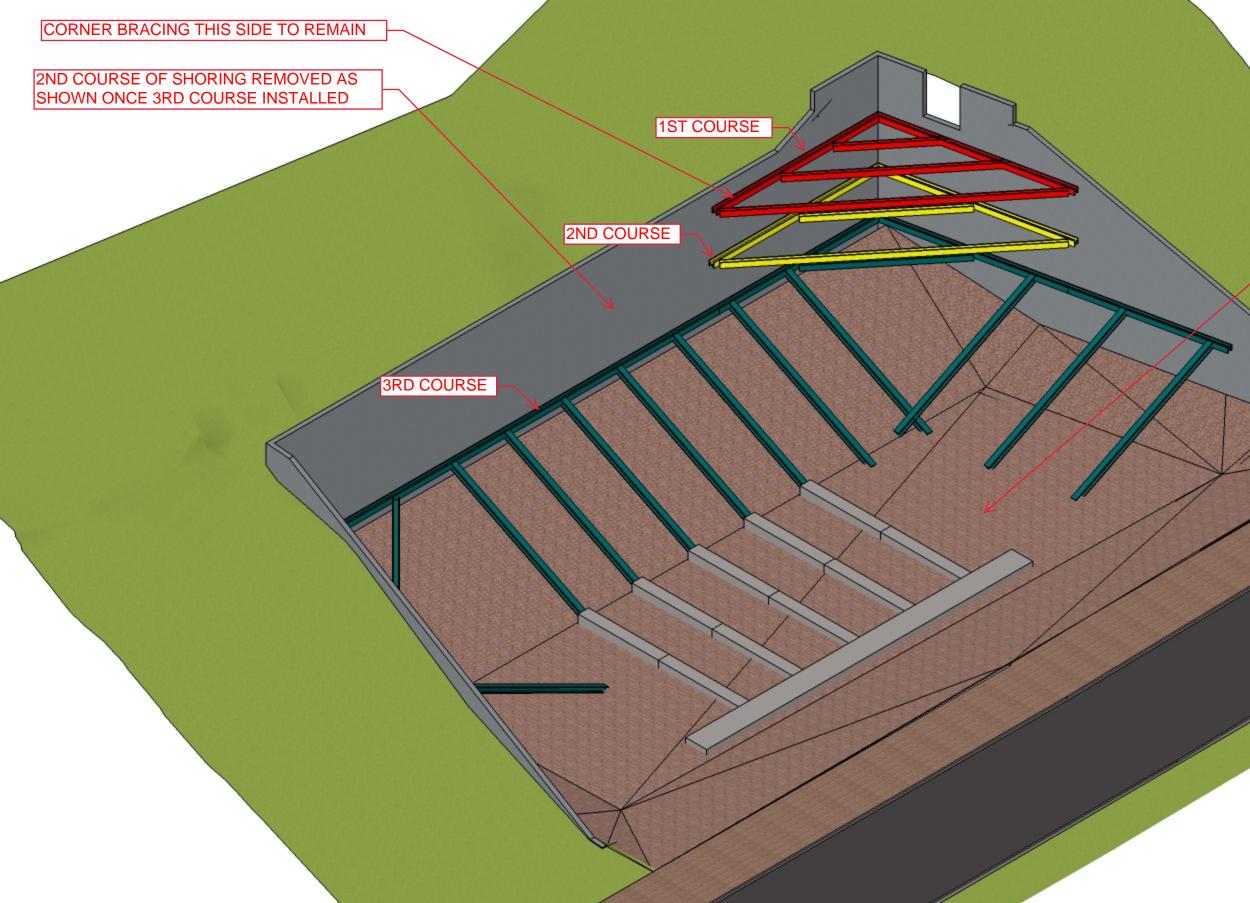


EXTEND CONCRETE GRADE BEAM TO SUPPORT LOWEST BRACING LINE.

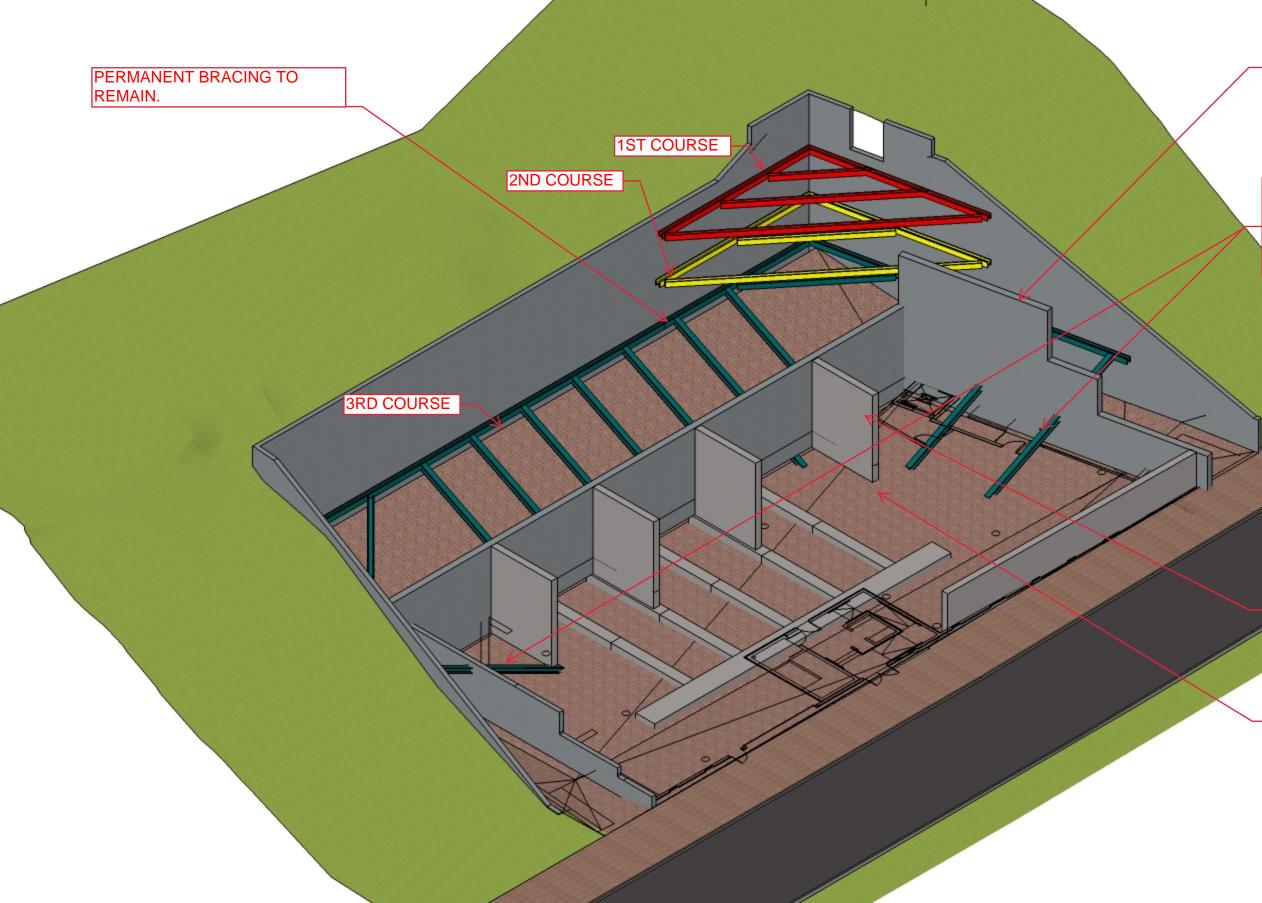
> CONC GRADE BEAMS AND FOOTINGS TO BE INTEGRAL WITH BUILDING FOUNDATION.

FINAL CUT OF EXCAVATION TO ELEV. 110'-0" +/-. ELEVATOR PITS ETC., MAY REQUIRE ADDITIONAL LOCAL TEMP SHORING BY G.C. AT TIME OF EXCAVATION

THIS STEP ILLUSTRATES THE MAX EXCAVATION DEPTH TO BEGIN CONTRUCTION OF CONCRETE BUILDING FOUNDATIONS



## FINAL CUT OF EXCAVATION TO ELEV. 110'-0" +/-.

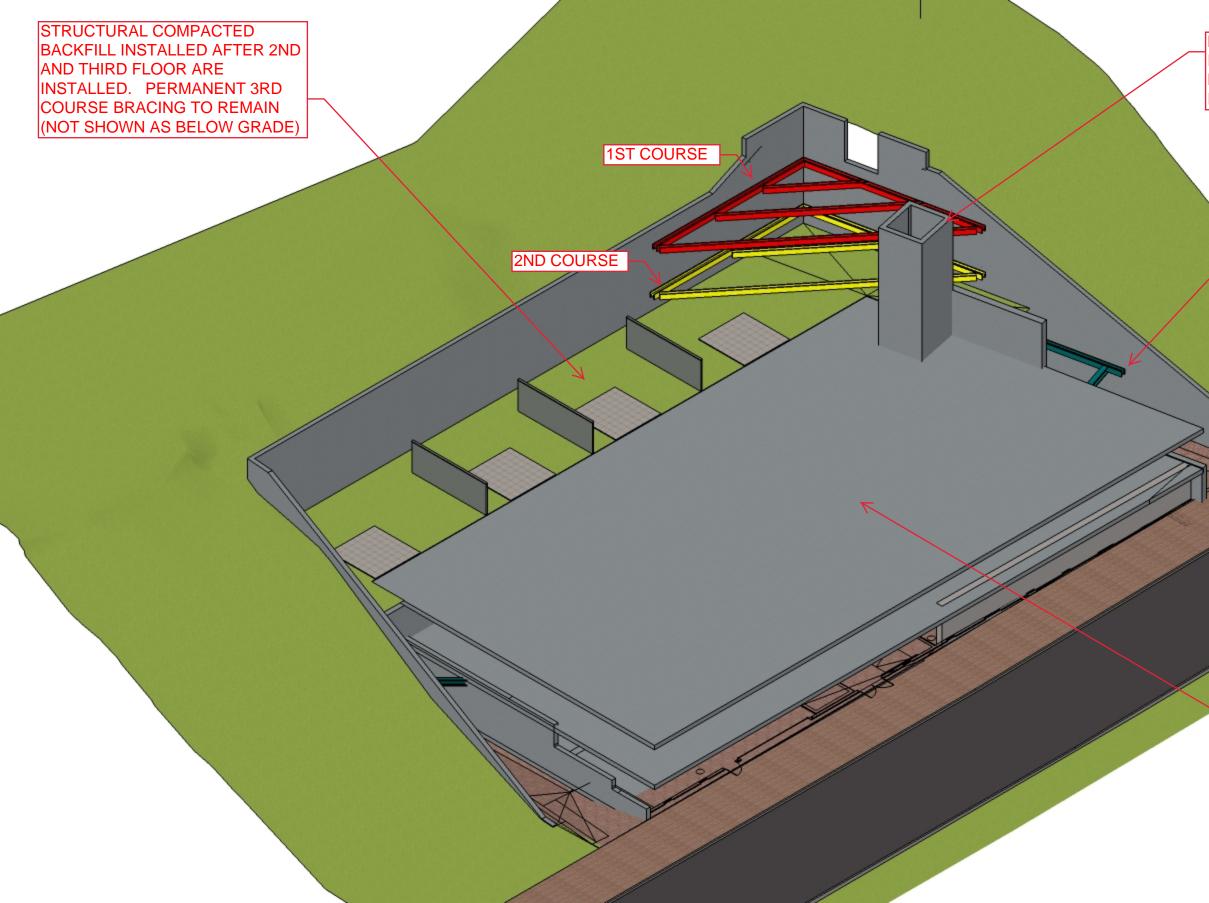


BEGIN CONSTRUCTION OF CONC FOUNDATION. 3FT & 4FT WIDE FOOTINGS BEARING ON SOIL W/ 18" CONCRETE EXTERIOR WALLS. ASSUMING 3,000PSF BEARING PRESSURE (TO BE CONFIRMED)

BRACING TO REMAIN AT THIS PHASE, BUT WILL BE CUT OFF AND ATTACHED TO FOUNDATION WALL AT WING WALLS

PERFORATED CONCRETE BUTTRESS WALLS ARE APPROXIMATE AND WILL LIKELY STEP BACK AT 2ND FLOOR.

5FT WIDE x 14" DEEP x CONT. CONC FOOTING BELOW BUTTRESS WALLS (NOT SHOWN)

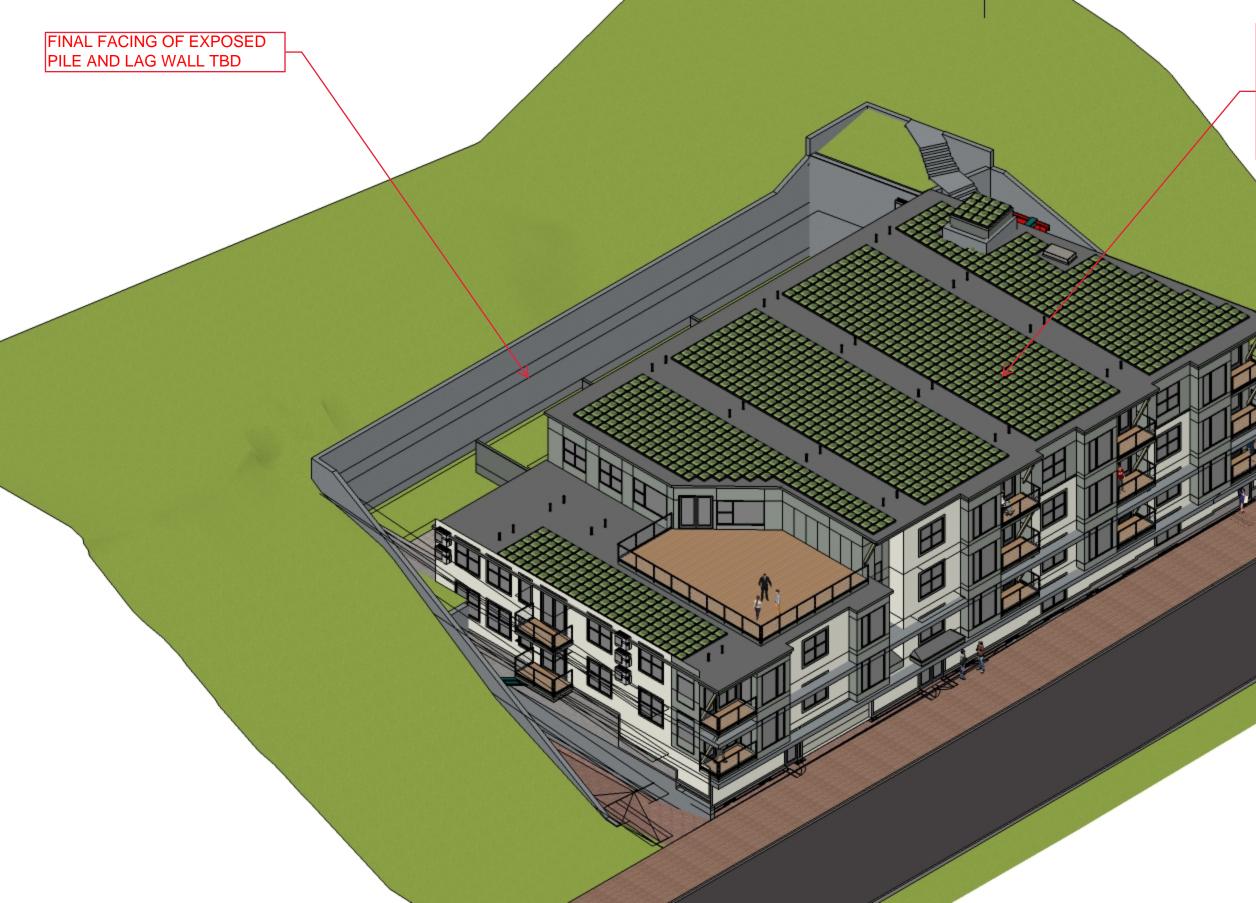


## BUILD CONCRETE OR CMU ELEVATOR SHAFT FULL HEIGHT TO BRACE END WALL EXCAVATION.

BEGIN CONSTRUCTION OF STEPPED RETAINING WALLS AFTER 2ND AND THIRD FLOOR ARE INSTALLED.

BUILD 2ND AND 3RD FLOOR. BOTH FLOORS CONSTRUCTED OF 6 1/2" TOTAL DEPTH 4,500PSI NORMAL WEIGHT CONCRETE ON GALV. 2" VLI 22 GAGE COMPOSITE METAL DECKING ON STEEL FRAMED BEAMS @ 8'-0" O.C. MAX.

FINAL CONCRETE RETAINING WALL CAST ON MICROPILES DRIVEN THROUGH FILL. INSTALL PERMANANT BRACING TO FULL HEIGHT SHAFT AND REMOVE EXPOSED PORTIONS OF BRACING FOR FINAL CONCRETE RETAINING WALL CAST ON MICROPILES.



CONSTRUCT TOP TWO FLOOR OF WOOD FRAMING: 24" DEEP P.E. TRUSSES SPANNING TO -CENTRAL 2x6 @ 16" O.C. BEARING CORRIDOR WALLS BUILT OFF CONCRETE SLAB @ 3RD FLOOR.